RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number:	10/718,955
Source:	IFWO
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RAW SEQUENCE LISTING DATE: 03/01/2005
PATENT APPLICATION: US/10/718,955 TIME: 15:12:11

Input Set : A:\Sequence.txt

Output Set: N:\CRF4\03012005\J718955.raw

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3 <110> APPLICANT: Johnson, Clayton H.
             McEwen, Joan E.
      6 <120> TITLE OF INVENTION: Histoplasma capsulatum Chitin Synthase Sequences and Their
Use
             for Detection of Histoplasma capsulatum and Histoplasmosis
      9 <130> FILE REFERENCE: 294389
     11 <140> CURRENT APPLICATION NUMBER: US 10/718,955
     12 <141> CURRENT FILING DATE: 2003-11-21
     14 <150> PRIOR APPLICATION NUMBER: US 60/428,135
     15 <151> PRIOR FILING DATE: 2002-11-21
     17 <160> NUMBER OF SEQ ID NOS: 27
     19 <170> SOFTWARE: PatentIn version 3.3
     21 <210> SEQ ID NO: 1
     22 <211> LENGTH: 281
     23 <212> TYPE: DNA
     24 <213> ORGANISM: Histoplasma capsulatum
     26 <400> SEQUENCE: 1
     27 gtgagaaaac actctttcct atgtatatgc atatgatata gatatagata taggtataca
                                                                            60
     120
     31 atctgtctgt atatatatac acatcgatat atatatgctt ttggctacgt attcaagcac
                                                                           180
     33 tggttccccc tggtcgcggg ccacggtacc agtggtttca ggatgatatc ctctcaacac
                                                                           240
     35 aggaaccacc ccttgctaac ttgcccctta aatcgctcca g
                                                                           281
     38 <210> SEQ ID NO: 2
     39 <211> LENGTH: 91
     40 <212> TYPE: DNA
     41 <213> ORGANISM: Histoplasma capsulatum
     43 <400> SEQUENCE: 2
     44 gtaggttttt gteettgatt tettttett tttacteece tetgetttgg tttatggteg
                                                                            60
     46 tctccttgct gatttgctgc tgccatctta g
                                                                            91
     49 <210> SEQ ID NO: 3
     50 <211> LENGTH: 78
     51 <212> TYPE: DNA
     52 <213> ORGANISM: Histoplasma capsulatum
     54 <400> SEQUENCE: 3
     55 gtcagtacat atatgatacc cgtagcccaa ttttttgcac cttctactac tgctacactg
                                                                            60
     57 tactaacttc ccgtctag
                                                                            78
     60 <210> SEQ ID NO: 4
     61 <211> LENGTH: 110
     62 <212> TYPE: DNA
     63 <213> ORGANISM: Histoplasma capsulatum
     65 <400> SEQUENCE: 4
     66 gtatgtgttg ttcaacaata taagtctttg ttcctccgaa caatgacatc cctctttcaa
                                                                            60
     68 cttccacttt cttcttgcgt ctattgtctc ccaacactaa catgttctag
                                                                           110
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71 <210> SEQ ID NO: 5

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72 <211> LENGTH: 149 73 <212> TYPE: DNA						
74 <213> ORGANISM: Histoplasma capsulatum						
76 <400> SEQUENCE: 5	60					
77 gtgagtttgc ataatctcct agtcaactaa ggggagcttc agaaatatcc aattcgtggc	60					
79 attgttattt tcattgccct tctccccggc gagattcccg gcgctgagct ccgatatatg 81 cgttagatga tactgatagc gcccctcag	120 149					
84 <210> SEQ ID NO: 6	143					
85 <211> LENGTH: 119						
86 <212> TYPE: DNA						
87 <213> ORGANISM: Histoplasma capsulatum						
89 <400> SEQUENCE: 6						
90 gtaggcctta ctttcctttt ttcccccttc ctctttttt tttttcttt cgccttttgg	60					
92 ggaaaaaaa aaataaaaaa ataaaaacac tttgctaacg tgttcctccc acaatccag	119					
95 <210> SEQ ID NO: 7						
96 <211> LENGTH: 21						
97 <212> TYPE: DNA						
98 <213> ORGANISM: Artificial Sequence 100 <220> FEATURE:						
100 <220> FEATORE. 101 <223> OTHER INFORMATION: Synthetic sequence						
103 <400> SEQUENCE: 7						
104 cactettee tatgtatatg c	21					
107 <210> SEQ ID NO: 8						
108 <211> LENGTH: 21						
109 <212> TYPE: DNA						
110 <213> ORGANISM: Artificial Sequence						
112 <220> FEATURE:						
113 <223> OTHER INFORMATION: Synthetic sequence						
115 <400> SEQUENCE: 8	21					
116 cgatttaagg ggcaagttag c 119 <210> SEQ ID NO: 9	21					
119 <210 > SEQ 1D NO: 9 120 <211 > LENGTH: 2251						
120 (211) LENGTH: 2231 121 (212) TYPE: DNA						
122 <213> ORGANISM: Histoplasma capsulatum						
124 <400> SEQUENCE: 9						
125 cgcaaatcag caactgatcc gaccgcacga tgatggccca tcgacgcttc cccctgtgca	60					
127 gatgatgttc tgcttgaaac aaaagaacag taagaaaatc aactctcaca gatggctgtt	120					
129 caatgeettt ggeegaatee teaaceegga aatetgeate ttgetegaeg egggtaegaa	180					
131 gccgggtcat aaatccctcc tggcactgtg ggaagccttc tataacgaca aagatctggg	240					
133 cggctcgtgc ggcgaaatcc acgctatgtt gggcaaaggc tggaaaaacc tcatcaaccc 135 tcttgttgca gcgcaaaact tcgaatacaa aatcagtaac atcctggata aacctctgga	300 360					
137 atcetectic ggetacgtea gegtgttgee eggtgeette tetgeetace getteegtge	420					
139 aatcatgggc agaccteteg aacagtactt ccaeggtgac catacactet ccaaacaact	480					
141 cggtcccaag ggtatcgagg gcatgaacat tttcaagaag aacatgttct tggccgagga	540					
143 teggattetg tgtttegaac tegtggeeaa ggeegggtee aaatggeate tgteetaegt	600					
145 caagtcgtcc aagggcgaga ctgacgtgcc cgagggagcc cccgaattca tcggccagcg	660					
147 tcgtcggtgg ctcaacggct cgttcgcagc tagtatctac tcattgatgc attttggccg	720					
149 aatgtataag agcggccata accttctgcg catgttcttt ttccatattc agatgatcta	780					
151 caatacgtgc accgttatca tgacttggtt tgcgcttgct tcatactggc tcacaacttc	840					

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153 cgtcatcatg gacctcgtcg gaaaccctcc cgctccagaa tctggcagca cgcagagggc
                                                                          900
155 atteccatte ggcaataceg ceacteegat tgteaacact gttetgaagt acttgtatet
                                                                          960
157 ggccttcctg ctcttgcagt ttattttggc tttgggtaac cggcctaaag gatctaaaca
                                                                         1020
159 ctcgtacatc acctccttcg tcgtattcgg cattatccaa ttgtacatca ttgtcttatc
                                                                         1080
161 catgtacctc gtcgtccgcg ccttcagcgg tggcacactc gccttcacaa cagacaaaag
                                                                         1140
163 tateggegaa tteeteaagt eettetteag tteegaagga eegggaatea teateatege
                                                                         1200
165 cctcgccgct accttcggcc tatatttcgt cgcttctttc atgtaccttg acccttggca
167 catgttcacc tectteeegg cetaceteet gateatgtee tegtacatea acateetgat
                                                                         1320
169 ggtctacgcc ttcagcaact ggcacgatgt gtcgtggggc acaaagggtg cggacaaagc
                                                                         1380
171 cgacgctctg ccctctgccc aaacgcaaaa ggaagacgac ggcaaagctg ctgtgatcga
                                                                         1440
173 ggagatcgac aagccgcagg cggatatcga cagccagttt gaaagcactg tgaagcgtgc
                                                                         1500
175 gctgacgccg tacgtggagc caaaggtgaa ggaggggaag tcgctagatg attcgtataa
                                                                         1560
177 gagtttccgc acgcggttgg tgacgctatg gctgttttcg aatggcattc ttgccgtggc
                                                                         1620
179 cattaccaqc qaqqatqtqa acaaqtttqq attcacqtcc cqaqcaacca qccqaaccac
                                                                         1680
181 gcatttcttc caggetetec tttgggegac egeagegete teceteatec getteaeegg
                                                                         1740
183 cgcatgctgg ttccttggcc ggactggaat tatgtgctgc ttcgcgagaa gatagtcagt
                                                                         1800
185 ccatttggct ctggattttc tatatatttt gtttggtgat gcaaaaatct tttgcttccc
                                                                         1860
187 tttttccttt tctctttcgg gtgacctttt tgttgcgggc gacggcacga aacccggaat
                                                                         1920
189 aatataagac aaggatgggg gagaagagag catgaagatc gaagatcgaa agtcgaaagt
                                                                         1980
191 cgaaaattga aaggagaaga aaggaaatga caagaaactg gcagctgccg cttggccaac
                                                                         2040
193 tgttggaaag tttttctttt gcatttctat gaatatgtcc cgattttgtt tttcttttcc
                                                                         2100
195 cattgcttgt tgttcttttc gcttttttcg attcctttcc tataataatg gcaagatgtg
                                                                         2160
197 tcctatttcc tcctgcctgg cctctctttt gtgtgtttct atatgcgtga gagcctctga
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199 attccgaatc taatgttctg tttgttgtct t
                                                                         2251
202 <210> SEQ ID NO: 10
203 <211> LENGTH: 8355
204 <212> TYPE: DNA
205 <213> ORGANISM: Histoplasma capsulatum
208 <220> FEATURE:
209 <221> NAME/KEY: misc feature
210 <222> LOCATION: (46)..(46)
211 <223> OTHER INFORMATION: n=any nucleotide
213 <220> FEATURE:
214 <221> NAME/KEY: misc feature
215 <222> LOCATION: (50)..(50)
216 <223> OTHER INFORMATION: n=any nucleotide
218 <220> FEATURE:
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220 <222> LOCATION: (73)..(73)
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225 <222> LOCATION: (97)..(97)
226 <223> OTHER INFORMATION: n=any nucleotide
228 <220> FEATURE:
229 <221> NAME/KEY: misc feature
230 <222> LOCATION: (108)..(108)
231 <223> OTHER INFORMATION: n=any nucleotide
233 <220> FEATURE:
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60

1980

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234 <221> NAME/KEY: misc feature
     235 <222> LOCATION: (205)..(205)
     236 <223> OTHER INFORMATION: n=any nucleotide
     238 <220> FEATURE:
     239 <221> NAME/KEY: misc feature
     240 <222> LOCATION: (215)..(215)
     241 <223> OTHER INFORMATION: n=any nucleotide
     243 <220> FEATURE:
     244 <221> NAME/KEY: misc feature
     245 <222> LOCATION: (236)..(236)
     246 <223> OTHER INFORMATION: n=any nucleotide
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     249 <221> NAME/KEY: misc feature
     250 <222> LOCATION: (254)..(254)
     251 <223> OTHER INFORMATION: n=any nucleotide
     253 <400> SEQUENCE: 10
W--> 254 tgcttttttg aaggtteeta ceettageee aaagteegge ttteenettn ttttettttt
     256 ttetttttgg aenaggaeea tggateeece eeceatneat egggteenga gagaagatgg
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318 catcttette tteegetget etgttetege tegtetetet tetetettet ettttetetg

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320	cctctcttcc	tcctctcgat	ccatccatct	attctcccct	ctatccttct	atccgcttca	2040
322	tcaacccagc	ctctcgtttt	gacggcggcc	acageteect	catcatggcc	tatccaggct	2100
324	cgaactctcc	aggggggtac	ggcgatggcc	atcgactcca	tgacctccca	tctggcagcg	2160
			tgtatatgca				2220
			gcgtgtgtgt				2280
			catcgatata				2340
			cacggtacca				2400
			tgccccttaa				2460
			tcctccacca				2520
			gcggtggctc				2580
			accatcccca				2640
			gtgttcccgg				2700
			ggcgtcagcg				2760
	-		tccaaggctc				2820
			aggctaaata				2880
			ggtttttgtc				2940
			ccttgctgat				3000
			actctgcaca		_		3060
			attgctatta				3120
			atgcaaaata				3180
			cctgcttggc				3240
			gacaccctcg				3300
			gtcgatggaa				3360
			ttttttgcac				3420
			acccaactct				3480
			acgcttcccc				3540
372	agaacagtaa	gaaaatcaac	tctcacagat	ggctgttcaa	tgcctttggc	cgaatcctca	3600
			ctcgacgcgg			_	3660
			aacgacaaag				3720
378	ctatgttggg	caaaggctgg	aaaaacctca	tcaaccctct	tgttgcagcg	caaaacttcg	3780
380	aatacaaaat	cagtaacatc	ctggataaac	ctctggaatc	ctccttcggc	tacgtcagcg	3840
382	tgttgcccgg	tgccttctct	gcctaccgct	tccgtgcaat	catgggcaga	cctctcgaac	3900
384	agtacttcca	cggtgaccat	acactctcca	aacaactcgg	tcccaagggt	atcgagggca	3960
386	tgaacatttt	caagaagaac	atgttcttgg	ccgaggatcg	gattctgtgt	ttcgaactcg	4020
388	tggccaaggc	cgggtccaaa	tggcatctgt	cctacgtcaa	gtcgtccaag	ggcgagactg	4080
390	acgtgcccga	gggagccccc	gaattcatcg	gccagcgtcg	tcggtggctc	aacggctcgt	4140
392	tcgcagctag	tatctactca	ttgatgcatt	ttggccgaat	gtataagagc	ggccataacc	4200
394	ttctgcgcat	gttctttttc	catattcaga	tgatctacaa	tacgtgcacc	gttatcatga	4260
396	cttggtttgc	gcttggtatg	tgttgttcaa	caatataagt	ctttgttcct	ccgaacaatg	4320
398	acatccctct	ttcaacttcc	actttcttct	tgcgtctatt	gtctcccaac	actaacatgt	4380
400	tctagcttca	tactggctca	caacttccgt	catcatggac	ctcgtcggaa	accctcccgc	4440
402	tccagaatct	ggcagcacgc	agagggcatt	cccattcggc	aataccgcca	ctccgattgt	4500
404	caacactgtt	ctgaagtact	tgtatctggc	cttcctgctc	ttgcagttta	ttttggcttt	4560
406	gggtaaccgg	cctaaagggt	gagtttgcat	aatctcctag	tcaactaagg	ggagcttcag	4620
408	aaatatccaa	ttcgtggcat	tgttattttc	attgcccttc	tccccggcga	gattcccggc	4680
			ttagatgata				4740
			attcggcatt				4800
414	tacctcgtcg	tccgcgcctt	cagcggtggc	acactcgcct	tcacaacaga	caaaggtatc	4860
416	ggcgaattcc	tcaagtcctt	cttcagttcc	gaaggaccgg	gaatcatcat	catcgccctc	4920

RAW SEQUENCE LISTING ERROR SUMMARY DATE: 03/01/2005 PATENT APPLICATION: US/10/718,955 TIME: 15:12:12

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Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents/at least one n or Xaa.

Seq#:10; N Pos. 46,50,73,97,108,205,215,236,254
Seq#:27; Xaa Pos. 8,15,16,18,25,28,33,36,37,38,39,46,47,48,52,53,61,63,64
Seq#:27; Xaa Pos. 65,68,71,74,86,87,88,89,90,91,92,94,95,97,98,99,100,101
Seq#:27; Xaa Pos. 106,107,108,125,128,133,142,143,144,145,146,179,208,280
Seq#:27; Xaa Pos. 298,300,316,380,392,596,619,620,621,622,624,625,640,676
Seq#:27; Xaa Pos. 681,685,686,687,690,701,702,703,711,722,728,746,759,761
Seq#:27; Xaa Pos. 803,834,842,846,870,874,875,877,884,890,891,894,921

VERIFICATION SUMMARY

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L:254 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10 after pos.:0

M:341 Repeated in SeqNo=10

L:2099 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:27 after pos.:0

M:341 Repeated in SeqNo=27